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EXAMINER

ZIMMER, MARC S

ART UNIT

PAPER NUMBER

1712

DATE MAILED: 06/07/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/763,031

Applicant(s)

BRANDT ET AL.

Examiner

Marc S. Zimmer

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 January 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6, 8-11, 17, 18, 20 and 21 is/are rejected.
- 7) ☒ Claim(s) 7, 12-16 and 19 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 01/22/04.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date: _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

Claim Objections

Claim 9 is objected to because the word alcohol is missing after the phrase "low molecular weight" in line 1 of the claim.

Claim Analysis

In the Examiner's estimation, the term "dispersing" may be defined as "mixing with" and "medium" refers to some component of a composition that represents a large fraction of the composition with which another component representing a minor component of the composition may be mixed.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 21 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. It is not clear what makes the coating a UV coating.

Generally "UV" used in connection with the characterization of a coating is an indication of the curing mechanism employed to harden the coating into a film. However, there is no mention of a UV curable coating, which ostensibly would represent a dispersion matrix, in claim 20.

If, in fact, the Examiner's interpretation of the meaning of UV as a descriptive term is correct, then there is simply a lack of antecedent basis in claim 20 for that limitation of claim 21.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-6, 8-11, 17-18, and 20 are rejected under 35 U.S.C. 102(b) as being anticipated by Koerner et al., U.S. Patent # 4,452,961. Koerner discloses in columns 3 and 4 a resin synthesized by reacted an alkoxysiloxane equivalent to component (a) of the instant invention with a compound featuring two ester moieties, hence it is aptly labeled a polyester, and two hydroxyl groups. At the top of column 7, they disclose the assembly of a composition comprising the polymer a catalyst, a small volume of monobutyl ethylene glycol and titanium dioxide. In this scenario, the catalyst may be equated with the solid to be dispersed, the resin with the dispersing resin of the instant invention, and titanium dioxide with the dispersion medium. (Applicant has acknowledged in claim 11 that the medium may be a solid.)

Claim 9 stands rejected because it further limits an aspect of the invention that does factor into the Examiner's grounds for rejection.

Allowable Subject Matter

Claims 7, 12-16, and 19 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Claim 10 is allowable because the small volume of monobutyl ethylene glycol could not under any reasonable definition

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of the term medium be treated as the medium in the system disclosed at the top of column 7. As for claims 12-15, the Examiner has laid out the rejection such that the pigment is the medium and the catalyst the solid. It would be inappropriate to refer to the pigment as both medium and solid since this would mean essentially that the pigment was being dispersed in itself.

Claim 21 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

The following references represent the closest prior art outside of *Koerner*.

Yoshikawa et al., U.S. Patent # 5,457,166

Yoshikawa discloses a polyester-modified silicone resin wherein the silicone portion is a lower condensate of specified alkoxysilanes. There is no suggestion that any of the condensates prepared using the methodology described therein yields a cyclic oligomer bearing an alkoxy group pendant to each silicon atom.

Rooney et al., U.S. Patent # 5,349,021

Rooney discloses a copolymer dispersant comprising polysiloxane segments and polyester segments. As in the above case, there is no suggestion that an alkoxy-functionalized cyclosiloxane may be employed in the preparation of the copolymer.

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Dietz et al., U.S. Patent Application Publication No. 2004/0214977

Dietz teaches yet another polysiloxane-polyester copolymer dispersant that fails to anticipate the claimed invention because the structure of the polysiloxane reactant does not adhere to the structural parameters of the alkoxysiloxane precursor used to make the claimed copolymer.

Ishikawa et al., U.S. Patent # 6,329,460

Ishikawa does, in fact teach a polymer dispersant derived from an alkoxy-functional cyclosiloxane and an alcohol (column 5). There is, however, nothing motivating the skilled artisan to modify this invention by including a hydroxyl group-functionalized polyester as a co-reactant in the formation of the dispersant.

Kessell, U.S. Patent # 6,683,130

Kessel teaches the utilization of a polysiloxane-polyether copolymer as a dispersant. The copolymer does not adhere to the formula set forth in the description of component (a) of the instant invention nor is there any indication that the copolymer is modified by way of reaction with a polyester.

Birkett, U.S. Patent # 5,418,280

Birkett advocates using a polyhydroxycarboxylic acid as a dispersant for solid materials added to a silicone-based medium.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marc S. Zimmer whose telephone number is 571-272-1096. The examiner can normally be reached on Monday-Friday 8:00-4:30.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Randy Gulakowski can be reached on 571-272-1302. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

June 3, 2005

Marc Zimmer
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AU 1712